BRUHAT BANGALORE MAHANAGARA PALIKE

YELHANKA ZONE ELECTRICAL DIVISION

Detailed Estimate for Providing LED Street Lights as a Pilot Project in ward no 11

Budget Head ....P-3142.....

Division No..... Estimate No. ..06/16-17 For Rs. **2500000.00**

Sl.No.	SR Page & SL No	Description of Work	Qty.	Rate Rs.	Unit	Amount
1	33/5.2.1	Supply and erection of .....Mtr RCC Pole including earth work etc,. complete as per the standard technical specification of BESCOM 8Mtr 145Kg WL	40	6047.00	Nos	241880.00
2	26/4.35.3	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with				0.00
		minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts	72	18720.00	Each	1347840.00
3	74/22/C	Fabrication, supplying and erection of... Mtrs long hot dip Galvanized Octagongal pole made with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, backelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 180kmph for .....mtrs pole having dimensions bottom.....mm, top.....mm with 3/4 mm thick, suitable base plate and 4 Nos of .....long J Bolts along with template and the pole shall be galvanized with not less than 65 micron etc., (Withour foundation-For foundation details refer Previling civil S.R.) 7 Mtr height (bottom 150mm/top 75mm) (bottom dia 130mm, top dia 70mm, 3mm thick; size of base plate 220mmx220x12mm; 4 nos M20x700mm long 'J' bolts and nuts)	20	10500.00	Nos	210000.00

4	108/17.4.1	Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories.Single bracket 1.5 Mtr. Length	20	1929.00	Nos	38580.00
5	108/17.12	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe	100	893.00	Each	89300.00
6	12/2.12.1	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded **Aluminium** unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	250	7.50	Each	1875.00
7	56/7.6.1	Supplying of 1.1kv grade Aerial Bunched cable stranded & compacted Aluminium Phase conductor and Stranded Messenger conductor with all aluminium alloy, Phase conductor is insulated with XLPE compound insulated Messenger with specified IS - 14255:1995 & confirming to GTP of group A. 2 X 16 + 1 X 25 SQ.MM	450	92.00	Per Mtr	41400.00
8	Bes SR	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	450	10.30	Per Mtr	4635.00
9	6.42.2	Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility.300mmx450mmx214mm	15	5826.00	Nos	87390.00

	47/6.16.6	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.f)40-63 Amps SP, Group A	30	677.00	Each	20310.00
11	46/6.12.4	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	15	9915.00	Each	148725.00
12	6/2.6.7	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	15	132.00	Per Mtr	1980.00
13	17/3.10	Supplying and fixing phylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws	20250	0.22	Sqcm	4455.00
14	6 2/1.1.2	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plug incase of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. c)25mm dia 2mm thick	60	70.00	Mtrs	4200.00
15	7 56 /6.40.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat… with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. A)40x40x6mm.	15	263.00	Mtrs	3945.00
16	10 AR	Micro processor based electronic timer consisting of Display Unit(LCD), built in Real Time Clock (RTC) and keypad with option to operate relay/contactor in programmable mode (pre-defined ON/OFF time) or astronomical mode (based on sunset and sunrise depending on the latitude and longitude of the location of installation of Switch) or based on Intensity of natural light (lux level using IR sensor), built in software to select the mode of operation by the user	15	7214	Nos	108210.00

17	34/5.11	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	3500	30.00	Mtrs	105000.00
18	34/5.9.1	Supplying and Fixing .....including all Hardware's etc. complete as per the standard technical specification of BESCOM 1.1 KV Pin Insulator	75	44.00	Nos	3300.00
19	34/5.9.5	No. 8 Strain Insulator	50	14.00	Nos	700.00
20	5.4.2	Supply and fixing of .....cross arm including all Hardware's complete as per the standard technical specification of BESCOM. 2 Pin 45x45x5mm -510mm	90	306.00	Nos	27540.00
21	108/17.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	49	176.00	Nos	8624.00
22		Mislenious				111.00
		Total				**2500000.00**

CERTIFICATE

1. The Place was inspected and work is essential
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD (Elec) SR of 2014-15 .

T.N. Baddy
Jr/Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
yelhanka zone
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELHANKA ZONE
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. 25.00 lakhs
Twenty Five lakhs only
is accorded under head P-3142 Pilot project
Registered as EE No. EE/ELE/42/AS/06/16-17 Subject
to conditions contained in endorsement No. P.N. 50 and 51 Dt. 20.2.2017
SL/No. 06/16-17

Executive Engineer

Technical Sanction
Accorded For 25.00 lakhs.
Head of A/C P3142
CER NO : 167 Dt: 08/03/17

TA CE (YNK)